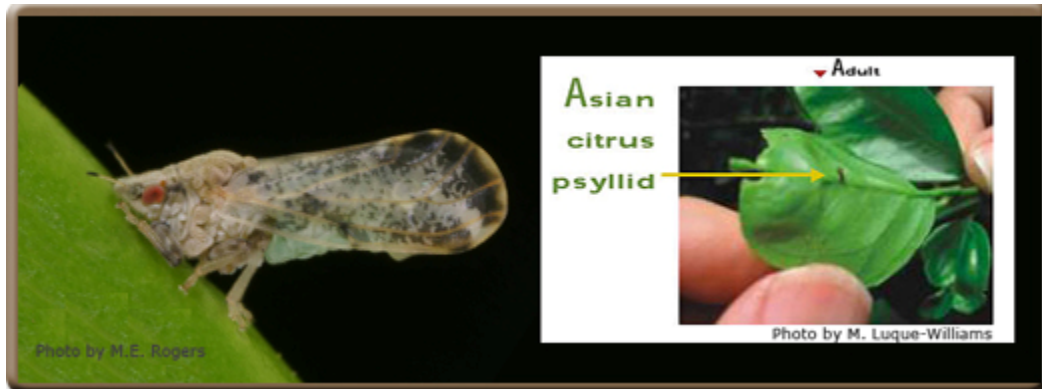


Asian Citrus Psyllid Pest Profile



COMMON NAME:

Asian Citrus Psyllid (ACP)

SCIENTIFIC NAME:

Diaphorina citri (Kuwayama)

ORDER AND FAMILY:

Hemiptera: Psyllidae

DESCRIPTION:

The Asian citrus psyllid is 3 to 4 mm long with a brown mottled body. The head is light brown. The wings are broadest in the apical half, mottled and with a dark brown band extending around the periphery of the outer half of the wing. The insect is covered with a whitish waxy secretion, making it appear dusty. Nymphs are generally yellowish orange in color, with large filaments confined to an apical plate of the abdomen. The eggs are approximately 0.3 mm long, elongate and almond-shaped. Fresh eggs are pale in color, but then turn yellow and finally orange at the time of hatching. Eggs are placed on plant tissue with the long axis vertical to the surface of the plant.

HISTORY AND ECONOMIC IMPORTANCE:

Asian citrus psyllid was first found in the U.S. in Palm Beach County, Florida, in June 1998 in backyard plantings of orange jasmine. By 2001, it had spread to 31 counties in Florida, with much of the spread due to movement of infested nursery plants. In the spring of 2001, ACP was accidentally introduced into the Rio Grande Valley on potted nursery stock from Florida. It was subsequently found in Hawaii in 2006; and in Alabama, Georgia, Louisiana, Mississippi, and South Carolina in 2008. It was first found in California on August 27, 2008 in San Diego County, and on October 13 it was found in Imperial County. Control and quarantine activities are underway in both counties.

DISTRIBUTION:

The Asian citrus psyllid is found in tropical and subtropical Asia, Afghanistan, Saudi Arabia, Reunion, Mauritius, parts of South and Central America, Mexico, the Caribbean, and the U.S. (Alabama, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, Texas). In California, it is present in San Diego and Imperial Counties, where it is under official control and quarantine actions.

LIFE CYCLE:

Eggs are laid on tips of growing shoots on and between unfurling leaves. Females lay 300 to 800 eggs during their lifetime. Nymphs pass through five instars. The total life cycle requires from 15 to 47 days, depending on environmental factors such as temperature and season. The adults may live for more than a month. There is no diapause, but populations are typically low in the winter or during dry periods. There are nine to 10 generations a year, with up to 16 observed under observation in field cages.

HOST AND DAMAGE:

The Asian citrus psyllid feeds mainly on *Citrus* spp., at least two species of *Murraya* and several other genera all in the family of Rutaceae. Direct injury caused by ACP results from the withdrawal of large amounts of sap from the plant as they feed and produce copious amounts of honeydew. The honeydew coats the leaves of the tree, encouraging sooty mold to grow. However, the most serious damage caused by ACP is due to its ability to effectively vector the phloem-inhabiting bacterium *Candidatus Liberibacter asiaticus* that causes [Huanglongbing \(HLB\)](#) disease. HLB is the most devastating disease of citrus in the world. Symptoms of HLB include yellow shoots, with mottling and chlorosis of the leaves. The juice of the infected fruit has a bitter taste and the fruit's skin may retain some green coloration even though it is ripe. Infected trees eventually die of the disease. The once flourishing citrus industry in India is slowly being wiped out by dieback. This dieback has multiple causes, but the major cause is due to HLB disease.

ACP PARTIAL HOST LIST:

COMMON NAME	SCIENTIFIC NAME
Bael fruit	<i>Aegle marmelos</i>
Chevalier's aeglopsis	<i>Aeglopsis chevalieri</i> <i>Afraegle gabonensis</i> <i>Afraegle paniculata</i> <i>Atalantia</i> spp.
Uganda powder flask	<i>Balsamocitrus dawei</i>
Curry leaf	<i>Bergera koenigii</i>
Cape chestnut	<i>Calodendrum capense</i>
Calamondin	<i>Citrofortunella microcarpa</i>
Citrange	<i>Citroncirsus webberi</i>
African cherry orange	<i>Citropsis schweinfurthii</i>
Citrus	<i>Citrus</i> spp. <i>Clausena anisum-olens</i>
Pink wampee	<i>Clausena excavata</i>
Clausena	<i>Clausena indica</i>
Wampee	<i>Clausina lansium</i>
Desert lime	<i>Eremocitrus glauca</i> <i>Eremocitrus hybrid</i>

COMMON NAME	SCIENTIFIC NAME
-------------	-----------------

Kumquat	Fortunella spp.
Wood apple	Limonia acidissima Merrillia caloxylon
Finger lime	Microcitrus australasica
Round lime	Microcitrus australis Microcitrus papuana Microcitronella sydney.
Mock orange	Murraya spp. Naringi crenulata Pamburus missionis
Trifoliolate orange	Poncirus trifoliata
Chinese box orange	Severinia buxifolia
Tabog	Swinglea glutinosa
Orange climber plant	Toddalia asiatica
Toddalia	Toddalia lanceolata Triphasia trifolia
White ironwood	Vepris lanceolata Xanthoxylum fagara